Patent claims
(Amended 3 May 2004)

1. A method of transporting a first data stream of a first bit rate, such as E1, through a Synchronous Digital Hierarchy (SDH) switched network from a first endpoint to a second endpoint using TDM,
characterized in

a) demultiplexing the first data stream from the first endpoint onto a number of Single pair High speed Digital Subscriber Lines (SHDSLs) each having a second data stream of a SHDSL adjusted second bit rate,

b) mapping each of the second data streams into data bit and/or unused overhead bit positions of SDH specified data containers,

c) multiplexing the data containers into the SDH switched network.

2. Method according to claim 1,
characterized in

d) inverting the steps a) - b) to retrieve the first bit rate at the second endpoint side.

3. Method according to claim 1 or 2,
characterized in that, in each of the second data streams, there is included an overhead of a third bit rate incorporating e.g. framing words, alarm indication and/or transmission quality measurement.

4. Method according to claim 3,
characterized in that at least a part of the overhead includes frame synchronisation words for meas-

uring delay differences between the SHDSL lines for thereby securing end-to-end integrity of the second data streams.

5. Method according to one of the preceding claims, characterized in that the data containers are C-12 containers with a bit rate of 2.176 Mbit/s.

6. Method according to claim 5, characterized in that the data bit positions are C-12 D-bit positions and the unused overhead bit positions are C-12 R-bit positions.

7. Method according to one of the preceding claims, characterized in that the number of SHDSLs is four, and the second bit rate is 2.120 Mbit/s.

8. Method according to claim 7, characterized in that the first bit rate is 8.448 Mbit/s and the third bit rate is 8 Kbit/s.

9. Method according to claim 7 or 8, characterized in that the R-bit positions being used are 8 R-bit positions in each of byte 34, 68, 102 and 136 in addition to bit number 7 in byte 1, 35, 69, and 103.

10. Method according to claim 1, characterized in that the first bit rate is X Mbit/s, the second bit rate is ix8kbit/s ($i \in [1,7]$) plus nx64kbit/s ($n \in [1,36]$) and the number of SHDSL lines is N and the number of datacontainers are N wherein N and X are any integer number.